

Boston

SPZ



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Introduction

Thank you for purchasing the Boston Acoustics SPZ component system. Nothing better describes SPZ components than best-in-class. With nearly 1-inch of peak-to-peak excursion, SPZ delivers more bass from a standard size speaker opening. Further, Our off-axis, free rotating tweeter AMD™ allows you to optimize the soundstage from OEM speaker locations. Component systems that combine installation flexibility with best-in-class performance are the clear choice for those who refuse to compromise the interior of their high performance vehicle. Others make claims. We deliver ours with the Boston Acoustics SPZ Reference Components.

Nearly 1-inch peak-to-peak excursion from finite-element optimized rubber surround

Performs as a larger diameter woofer yet drops into OEM speaker locations.

Component and axis mount configurable

Allows utilization of OEM speaker locations without radical customization.

Free rotating axis-mount geometry acts as both a lens and tweeter baffle to allow adjustable soundstage height from a fixed mounting position

Integrates woofer and tweeter as a seamless acoustic system.

Compact neodymium magnet structures

Deliver superb sound quality output from compact Magnetic-finite-element optimized structures.

Copper-clad aluminum woofer voice coils

Provides low-mass, long Xmax, and optimized DCR while maintaining power handling.

150W RMS power handling

Enabled by RadialVent® cooling and TwinStage™ heatsink.

System specific 24dB per octave crossovers with application specific filters

Minimizes driver placement issues based on OEM speaker locations.

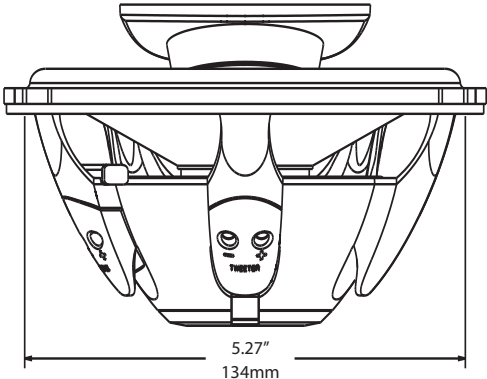
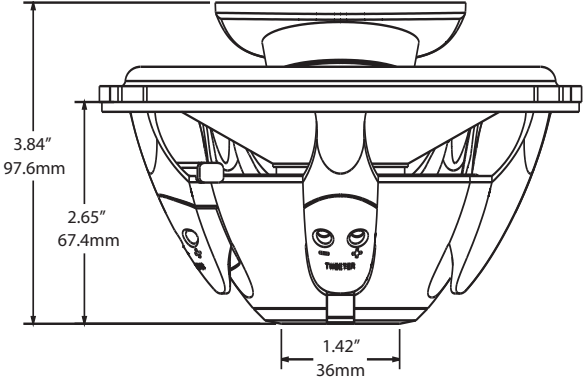
Specifications

Model:	SPZ60	SPZ50
<i>Nominal Size:</i>	6 ½" (165mm)	5 ¼" (135mm)
<i>RMS Power Handling:</i>	150w	150w
<i>Max Power Handling:</i>	300w	300w
<i>Nominal System Impedance:</i>	3Ω	3Ω
<i>Woofer Cutout Diameter:</i>	5" (127mm)	4 ¾" (120mm)
<i>Woofer Mounting Depth:</i>	2 1/16" (68mm)	2 9/16" (62mm)
<i>Surface Mount Tweeter Cup Cutout Diameter:</i>	1 ¾" (45mm)	1 ¾" (45mm)
<i>Surface Mount Tweeter Cup Mounting Depth:</i>	¾" (19mm)	¾" (19mm)
<i>Sensitivity (2.83v @ 1 Meter):</i>	90dB	90dB
<i>Frequency Response (±3dB in car):</i>	40-22kHz	50-22kHz
<i>Woofer Cone Material:</i>	Glass Fibre Composite	Glass Fibre Composite
<i>Tweeter Dome Material:</i>	Hard Anodized Aluminum Alloy	Hard Anodized Aluminum Alloy
<i>Crossover Filter:</i>	24dB per Octave	24dB per Octave
<i>Tweeter Attenuation:</i>	0dB / -2dB / -4dB	0dB / -2dB / -4dB
<i>Woofer Xmax (peak to peak):</i>	24mm	24mm

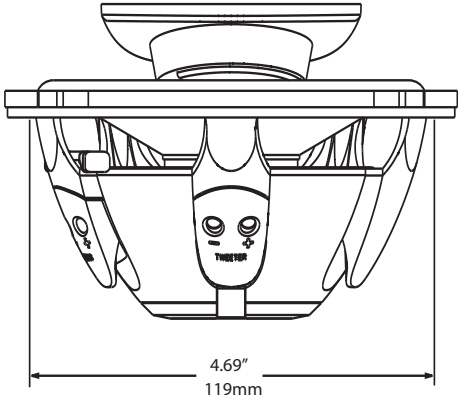
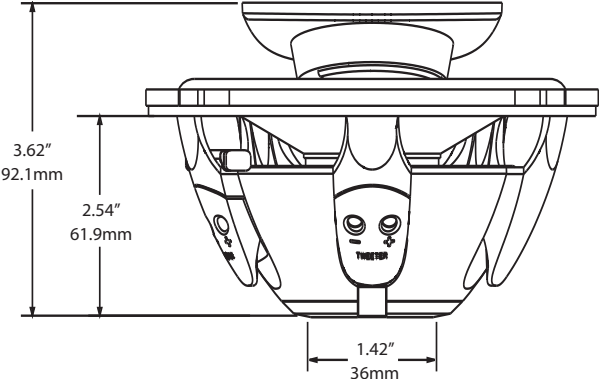


Dimensions

SPZ60 Woofer

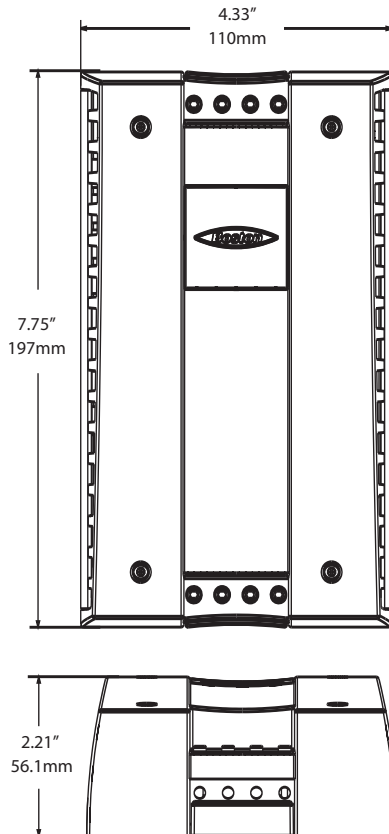


SPZ50 Woofer

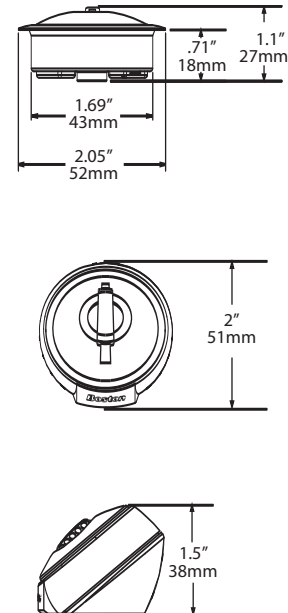


Dimensions

SPZ Crossover



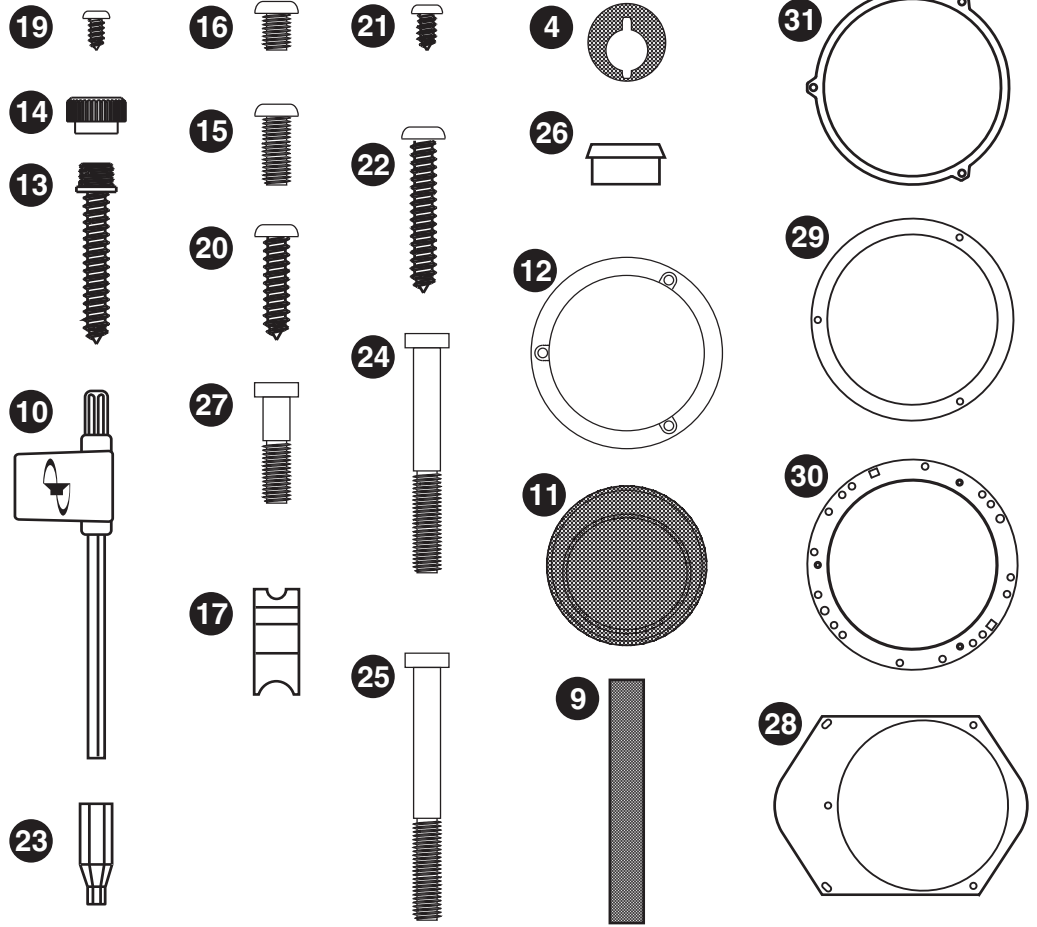
SPZ Tweeter





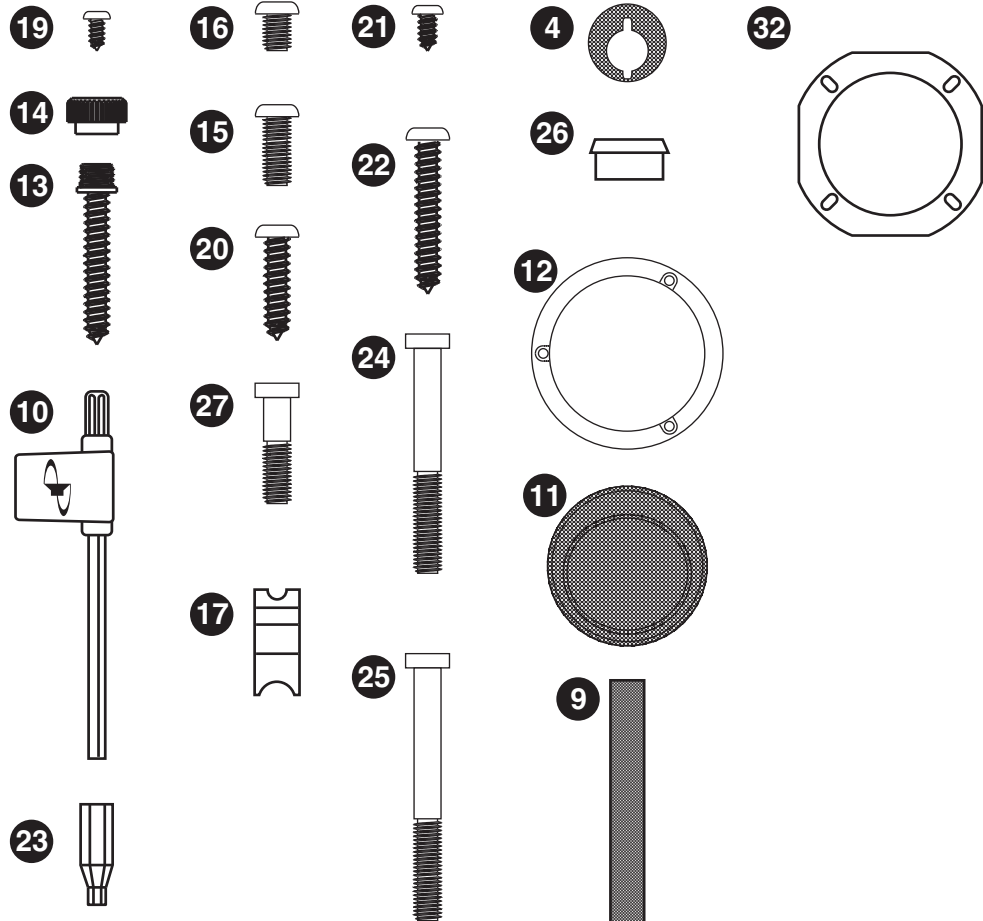
SPZ60 Included Parts and Accessories:

#	Description	Quantity
1	SPZ60 Woofer	2
2	Type-M1 1" Alloy Dome Tweeter	2
3	SPZ60 Crossover	2
4	Tweeter Grille	2
5	Tweeter Axis-Mount	2
6	Tweeter Flush-Mount	2
7	Tweeter Angle-Mount (top)	2
8	Tweeter Angle-Mount (bottom)	2
9	Woofer Gasket	4
10	Boston Hex Tool	1
11	Woofer Grille	2
12	Woofer Grille Mounting Ring	2
13	Woofer Screw	6
14	Thumb Screw (grille)	6
15	1/6" Socket Button Head Screw	6
16	1/4" Socket Button Head Screw	6
17	Spring Clips	4
18	Terminated Tweeter Wire	2
19	3/8" Pan Head Screw	2
20	1 1/8" Socket Button Head Screw	16
21	1/2" Self-Tapping Screw	4
22	1" Self-Tapping Screw	4
23	1/2" Hex Bit	1
24	Crossover Screw (short)	4
25	Crossover Screw (long)	4
26	Phase Plug Cap	2
27	Axis Mount / Phase Plug Screw	2
28	5 x 7" (127 x 177mm) Adapter	2
29	6" (160mm) Adapter	2
30	6 1/2" (165mm) Adapter	2
31	1/2" (13mm) Spacer	2



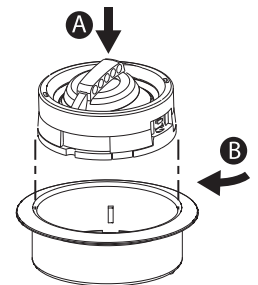
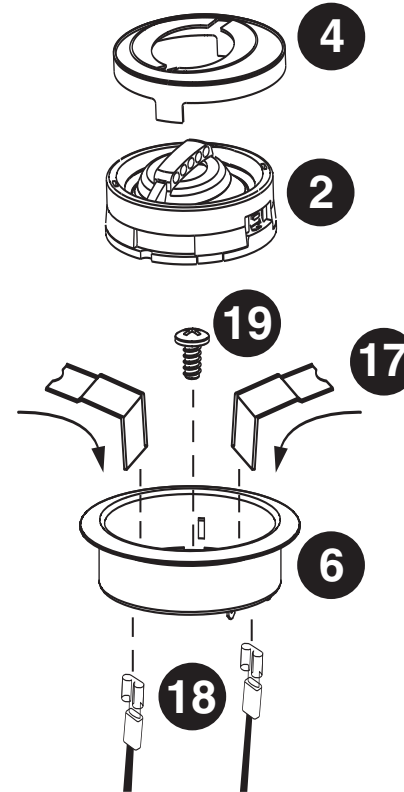
SPZ50 Included Parts and Accessories:

#	Description	Quantity
1	SPZ50 Woofer	2
2	Type-M1 1" Alloy Dome Tweeter	2
3	SPZ50 Crossover	2
4	Tweeter Grille	2
5	Tweeter Axis-Mount	2
6	Tweeter Flush-Mount	2
7	Tweeter Angle-Mount (top)	2
8	Tweeter Angle-Mount (bottom)	2
9	Woofer Gasket	4
10	Boston Hex Tool	1
11	Woofer Grille	2
12	Woofer Grille Mounting Ring	2
13	Woofer Screw	8
14	Thumb Screw (grille)	8
17	Spring Clips	4
18	Terminated Tweeter Wire	2
19	3/8" Pan Head Screw	2
20	1 1/8" Socket Button Head Screw	16
21	1/2" Self-Tapping Screw	4
22	1" Self-Tapping Screw	4
23	3/2" Hex Bit	1
24	Crossover Screw (short)	4
25	Crossover Screw (long)	4
26	Phase Plug Cap	2
27	Axis Mount / Phase Plug Screw	2
32	5 1/4" (135mm) Adapter	2



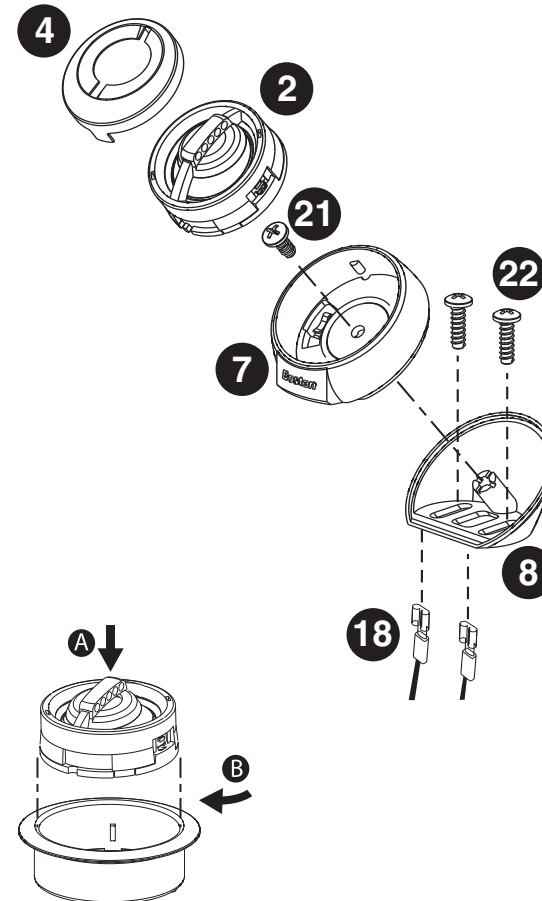
Tweeter Installation: Flush Mount

- 1) *Drill a hole for the tweeter cup ⑥ (1 ¾" / 45mm) making sure that there is adequate depth available (¾" / 19mm).*
- 2) *Connect the speaker wires ⑱ to the tweeter cup ⑥.*
- 3) *Insert the tweeter cup ⑥ into the mounting hole.*
- 4) *Insert the retaining clips ⑰ and set screw ⑲ and tighten.*
- 5) *Insert the tweeter ② into the cup, twist clockwise to lock the tweeter into position.
(Caution: Do not touch the dome of the tweeter, contact with the tweeter dome will damage the tweeter.)*
- 6) *Install the tweeter grille ④ by pressing gently into place.*



Tweeter Installation: Angle Mount

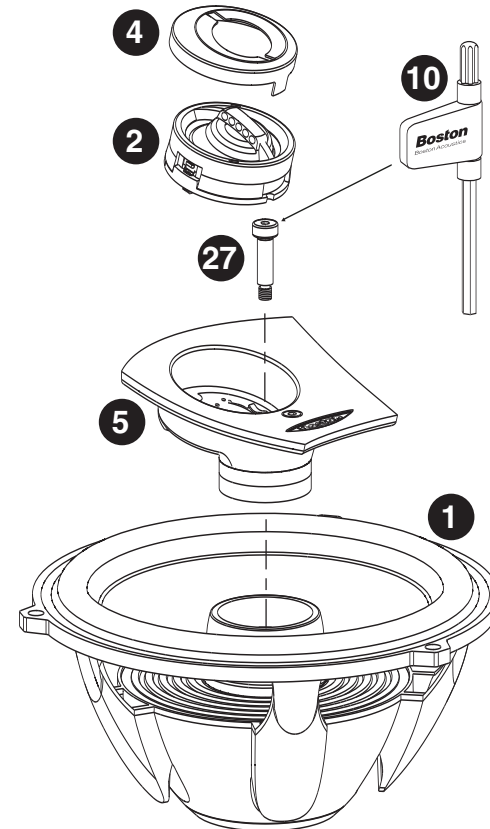
- 1) *Drill a hole for the speaker wire and pre-drill for the mounting screws if necessary*
- 2) *Mount the bottom cup 8 to the mounting surface using the provided screws 22 routing the speaker wires 18 through the center hole.*
- 3) *Attach the speaker wires 18 to the top cup 7 and mount it to the bottom cup 8 using the provided screw 21.*
- 4) *Insert the tweeter 2 into the cup 7, twist clockwise to lock the tweeter into position.
(Caution: Do not touch the dome of the tweeter, contact with the tweeter dome will damage the tweeter.)*
- 5) *Install the tweeter grille 4 by pressing gently into place.*





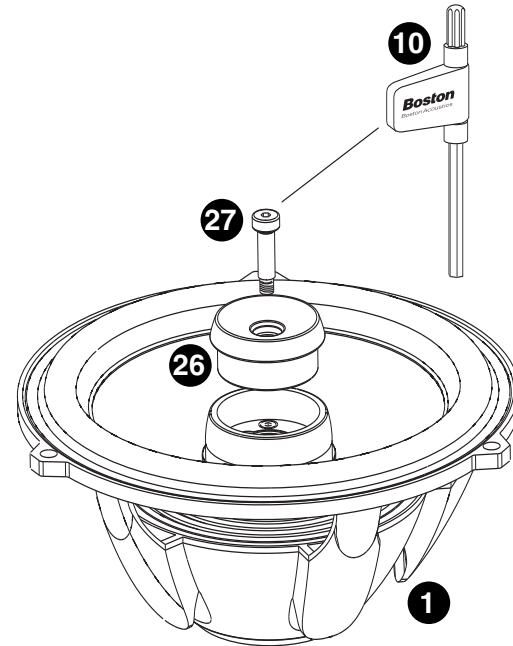
SPZ Woofer Axis Mount Installation:

- 1) *Insert the axis mount ⑤ into the woofer ①.*
- 2) *Insert and hand-tighten the retaining screw ②⑦ with the provided tool ⑩.*
- 3) *Insert the tweeter ② into the axis mount ⑤, twist clockwise to lock the tweeter ② into position.*
(Caution: Do not touch the dome of the tweeter, contact with the tweeter dome will damage the tweeter.)
- 4) *Install the tweeter grille ④ by pressing gently into place.*



SPZ Woofer Phase Plug Installation:

- 1) *Insert the phase plug 26 into the woofer 1.*
- 2) *Insert and hand-tighten the retaining screw 27 using the provided tool 10.*



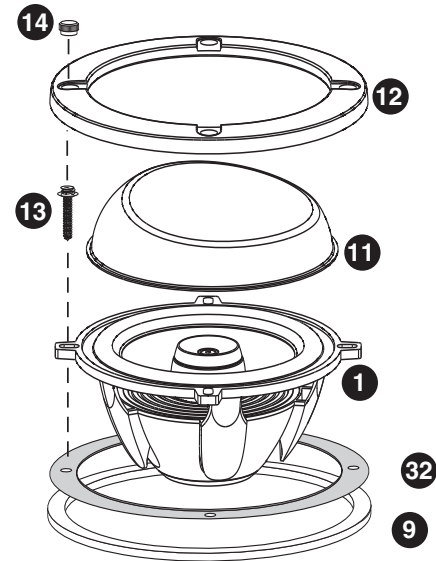


SPZ50 Woofer Installation:

- 1) *Install the gaskets 9 on the mounting flange of the woofer 1 and the back side of the 5 1/4" (135mm) adapter ring 32.*
- 2) *Mount the speaker 1 into the speaker location using the provided screws 13.*
- 3) *Position the axis mount 5 into the desired location (if applicable), refer to page 17.*

Grille Installation:

- 1) *Position the grille 11 on the woofer 1 so it does not physically touch the axis mount 5.*
- 2) *Mount the grille ring 12 using the four thumb screws 14, hand tighten.*

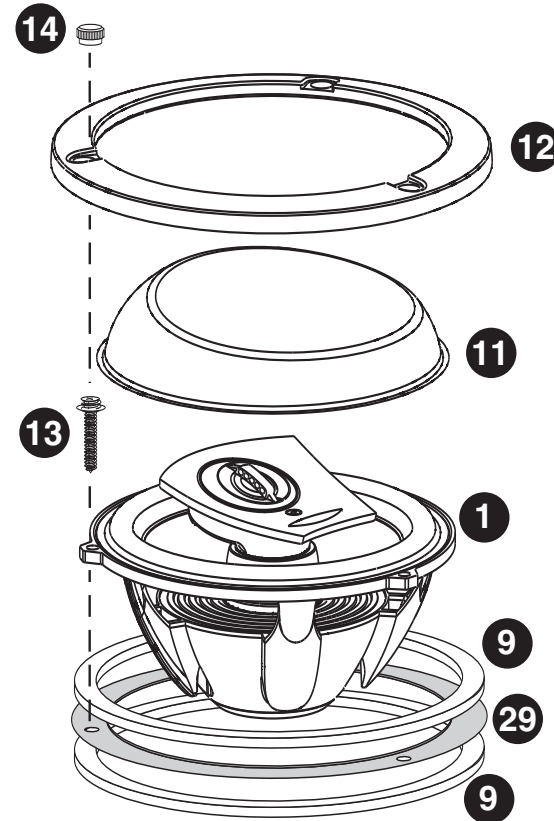


SPZ60 Woofer Installation with Grille:

- 1) *Install the gaskets ⑨ on the mounting flange of the woofer ① and the back side of the 6" (160mm) adapter ring ⑲ .*
- 2) *Mount the speaker ① into the speaker location using the provided screws ⑬ .*
- 3) *Position the axis mount ⑤ into the desired location (if applicable), refer to page 17.*

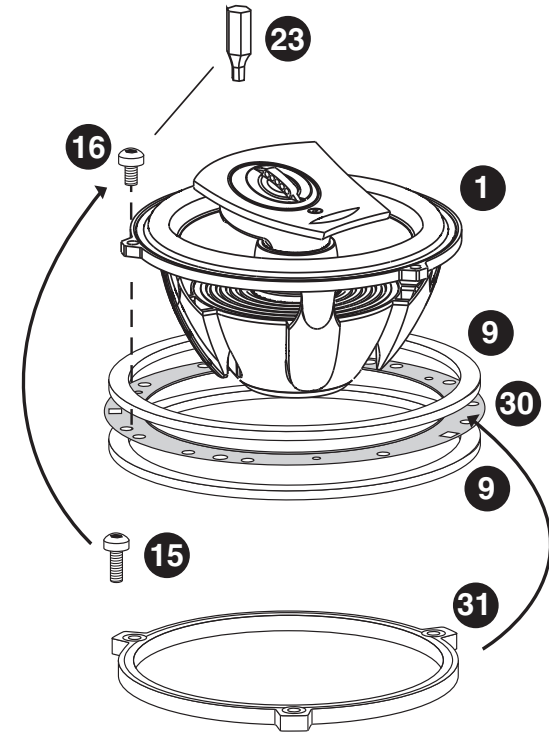
Grille Installation:

- 1) *Position the grille ⑪ on the woofer ① so it does not physically touch the axis mount ⑤ .*
- 2) *Mount the grille ring ⑫ using the three thumb screws ⑭ , hand tighten.*



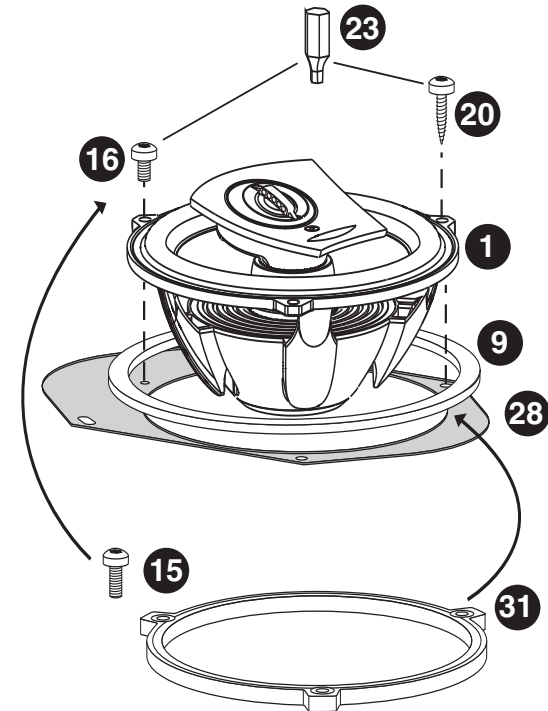
SPZ60 Woofer Installation with 6 ½" (165mm) VariMount™ Adapter Rings:

- 1) *Install the gaskets 9 on the mounting flange of the woofer 1 and the back side of the ½" (13mm) spacer ring 31 (if applicable).*
- 2) *Mount the speaker 1 on to the 6 ½" (165mm) VariMount™ plate 30 using the provided screws 16. Use alternative screw 15 if using the ½" (13mm) spacer ring.*
- 3) *Mount the speaker 1 into the speaker location using the provided screws 20.*
- 4) *Position the axis mount 5 into the desired location (if applicable), refer to page 17.*



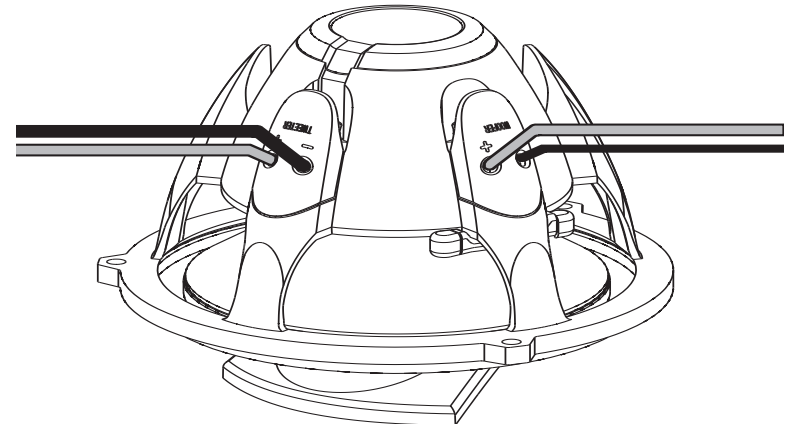
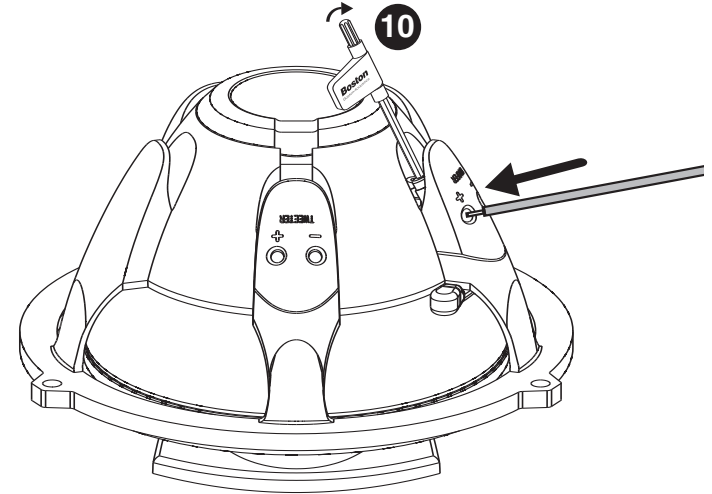
SPZ60 Woofer Installation with 5 x 7" VariMount™ Adapter Rings:

- 1) *Install the gaskets 9 on the mounting flange of the woofer 1 and the back side of the 1/2" (13mm) spacer ring 31 (if applicable).*
- 2) *Mount the speaker 1 on to the 5 x 7" VariMount™ plate 28 using the provided screw 16. Use alternative screw 15 if using the 1/2" (13mm) spacer ring 31.*
- 3) *Mount the speaker 1 into the speaker location using the provided screws 20.*
- 4) *Position the axis mount 5 into the desired location (if applicable), refer to page 17.*



Connecting Speaker Wires:

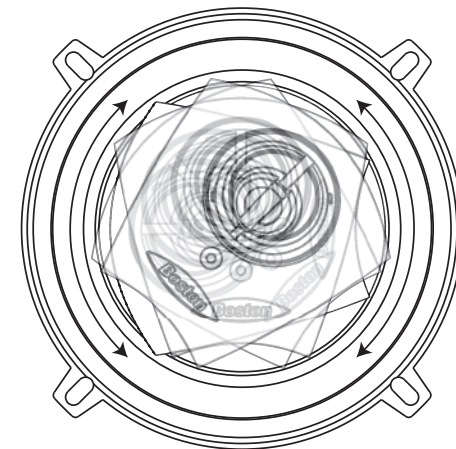
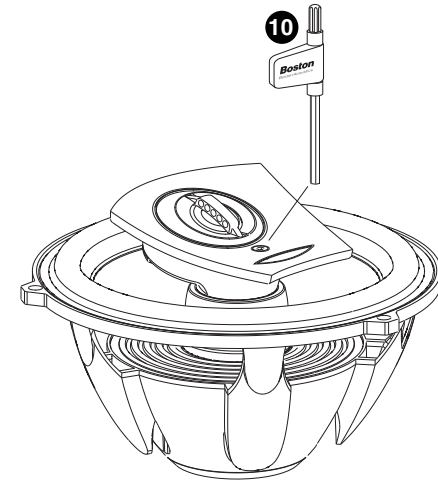
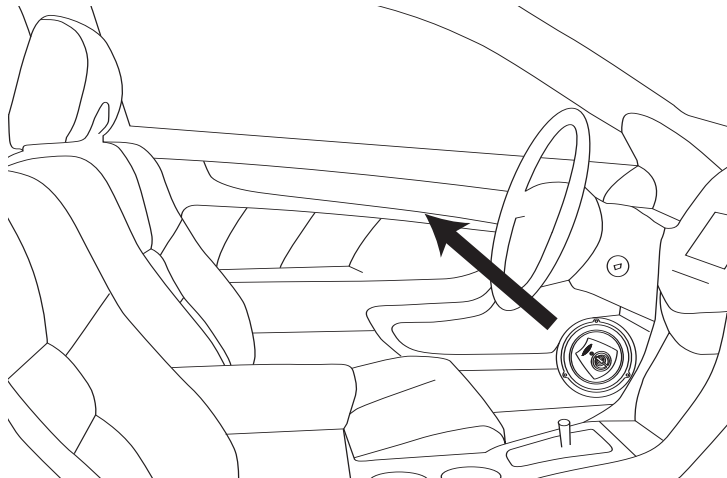
- 1) Strip $\frac{1}{4}$ " (10mm) of shield off of the speaker wires.
- 2) Insert the wire into the speaker terminal observing proper polarity.
- 3) Hand-tighten the gold set screws using the provided tool **10** (2.5mm).
(Note: do not overtighten the set screws.)



SPZ Axis Mount Positioning:

The axis mount on the SPZ woofer is designed so it can be positioned to properly direct the tweeter's output towards the listening position.

- 1) Loosen the retaining screw located on the face of the axis mount ⑤ with the provided tool ⑩ (2.5mm). Turn the screw at least three full rotations counter-clockwise.*
- 2) Position the axis mount ⑤ so that the tweeter points towards the listening area.*
- 3) Once the desired location has been chosen, tighten the screw on the axis mount.*
(Note: do not overtighten the set screw.)

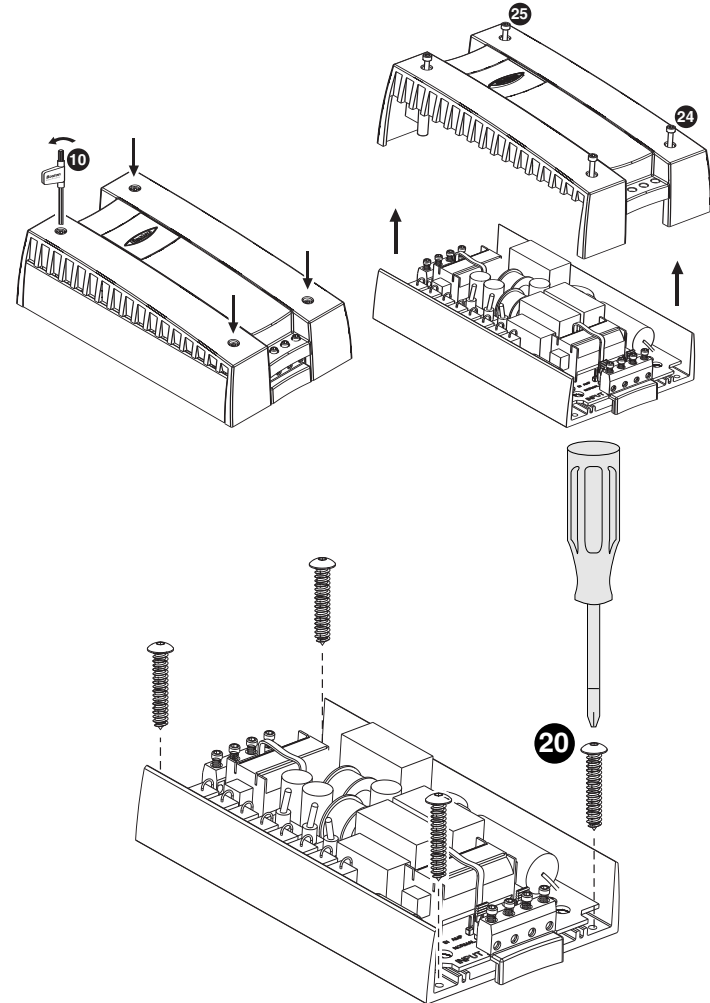




Crossover Installation:

- 1) Remove the four screws 24 and 25 located at each corner of the top panel.
- 2) Once the screws are removed, the cover will lift off the chassis.
- 3) Using the provided screws 20, secure the crossover to a solid surface.

Note; Due to shock and vibration, the crossovers should not be installed in the doors of the vehicle.



Crossover Configuration:

Axis / Comp Mount Switch:

The "Axis/Comp" switch optimizes the output from the crossover for the configuration of the component system. Use the "Axis" setting if the tweeter is installed in the axis mount, use the "Comp" setting if the tweeter is installed separate from the woofer.

SQ1 / SQ2 Switch:

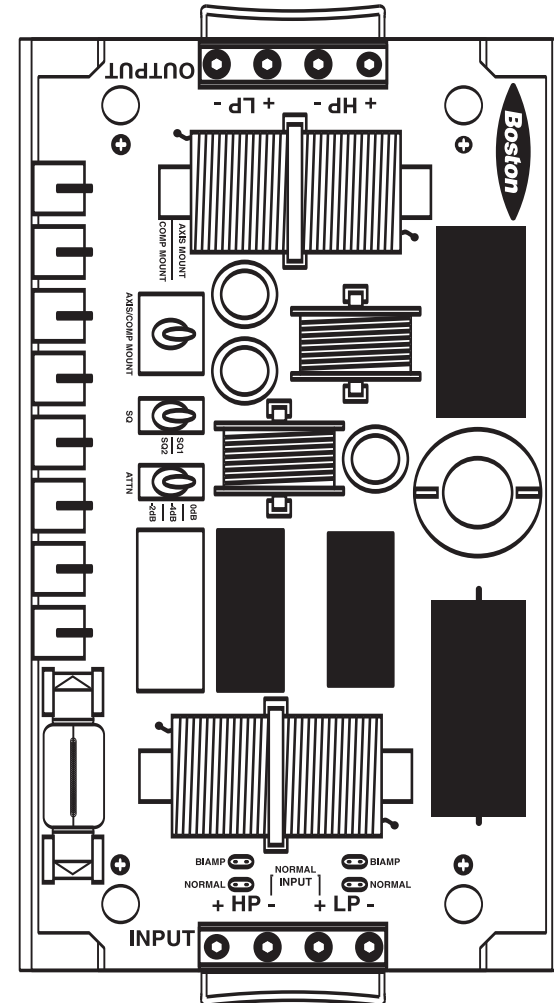
The "SQ1/SQ2" switch alters the roll-off of the SPZ woofer. Use the SQ1 position for a standard door location. Use the SQ2 setting if the SPZ woofer is used in a kick panel or small enclosure (less than 0.25 FT³).

ATTN Switch:

The "ATTN" (attenuation) switch adjusts the output of the tweeter relative to the woofer, three adjustments allow you to fine tune the output of the tweeter (0dB, -2dB, & -4dB).

NORMAL / BIAMP Jumpers:

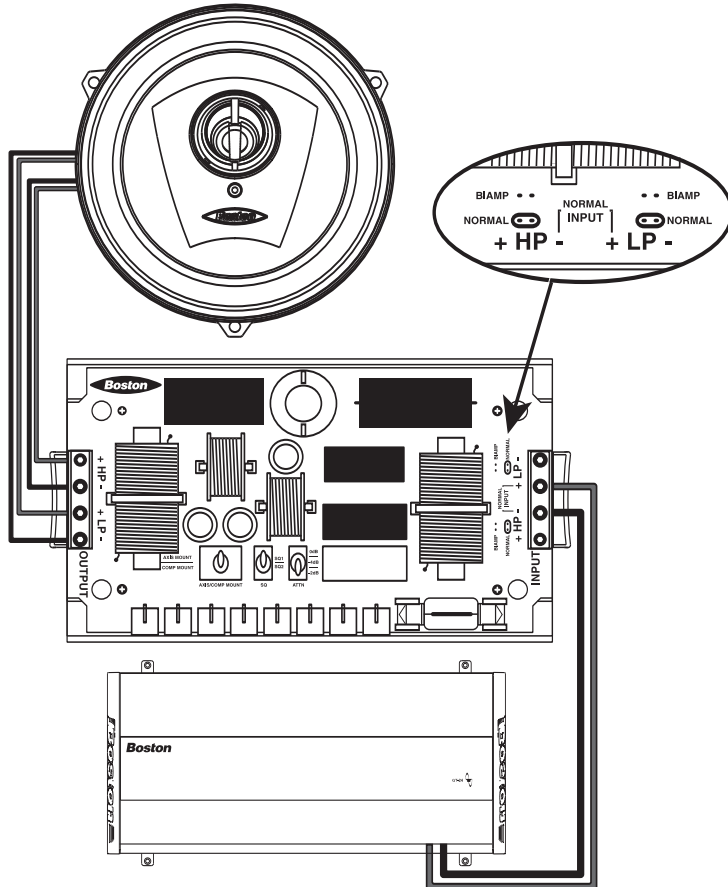
If the SPZ crossover is bi-amplified or bi-wired, move the jumpers to the "BIAMP" position. Refer to the System Wiring Diagrams on page 21.



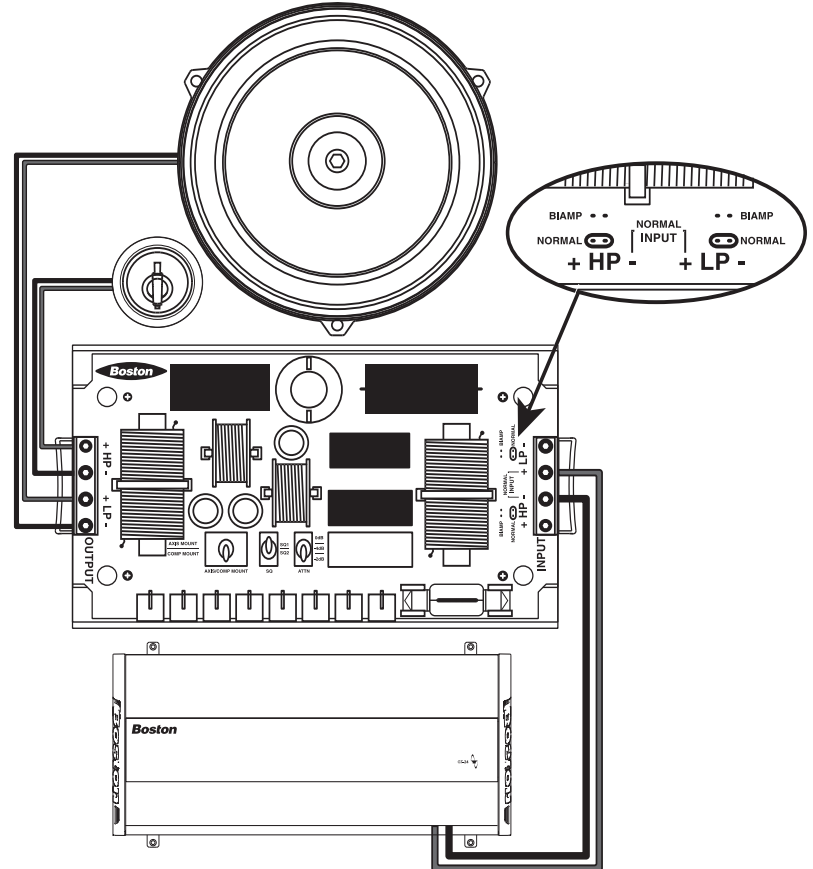


SPZ System Wiring (Standard):

Standard Wiring (Coaxial Configuration)

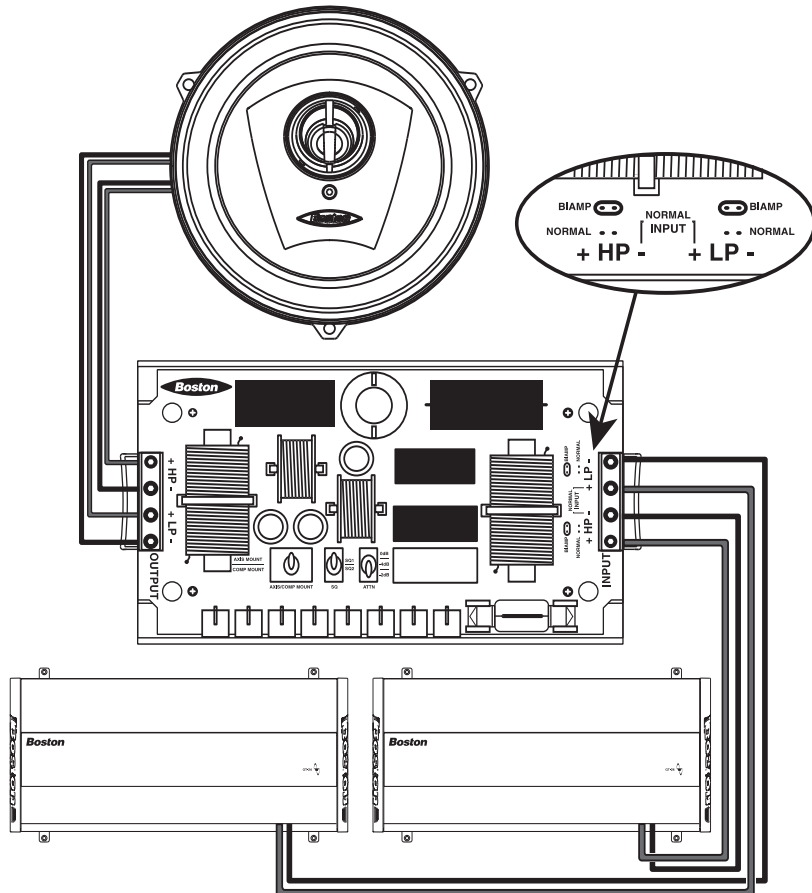


Standard Wiring (Component Configuration)

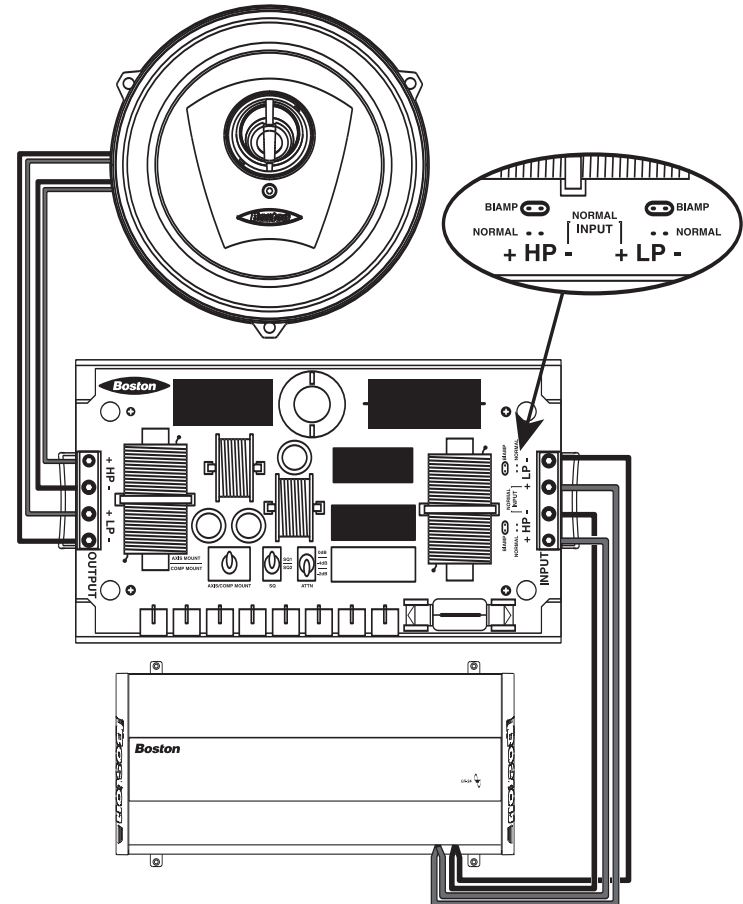


SPZ System Wiring (Bi-Amplification / Bi-Wiring):

Bi-Amplification



Bi-Wiring





Contact Information

Contacting Boston

For questions regarding installation or service, please contact the dealer from whom you have purchased the product or contact us directly at:

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Email: support@bostona.com

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Covered by patents issued and/or pending.

Notes:





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